

AMENDMENTS TO THE CLAIMS

The following is a complete listing of the claims indicating the current status of each claim and including amendments currently entered as highlighted.

1-39. (Canceled)

40. (Currently Amended) An endodontic instrument for removing material from a wall of a channel, the instrument comprising a hollow flexible member having a longitudinal axis and an initial cross-sectional area in a plane perpendicular to the longitudinal axis at each point along the longitudinal axis, the member comprising a wall having an open lattice structure surrounding a hollow interior portion of the instrument, the member being bendable along the axis and resiliently compressible in cross-sectional area such that, when inserted into a channel of cross-sectional area less than the initial cross-sectional area, the flexible member conforms to an internal shape of the channel.

41. (Previously Presented) The endodontic instrument of claim 40, wherein the flexible member is a shape memory member.

42. (Previously Presented) The endodontic instrument of claim 40, wherein the member further comprises a plurality of radially disposed elements, a cutting edge being disposed on the distal ends of the radially disposed elements.

43. (Previously Presented) The endodontic instrument of claim 40, further comprising a cutting edge on at least a portion of an exterior surface of the member.

44. (Previously Presented) The endodontic instrument of claim 40, further comprising on at least a portion of an exterior surface of the member at least one selected from a group consisting of an abrasive surface, a roughened surface, small teeth, and a cutting edge.

45-46. (Canceled)

47. (Previously Presented) The endodontic instrument of claim 44, wherein fluid can flow into the channel via a space between the wall of the channel and an outer surface of the endodontic instrument.

48. (Currently Amended) The endodontic instrument of claim 44, wherein said open lattice structure ~~the member~~ comprises at least one longitudinal element connected to a plurality of circumferential elements.

49. (Previously Presented) The endodontic instrument of claim 48, wherein the circumferential elements are straight elements.

50. (Previously Presented) The endodontic instrument of claim 48, wherein the longitudinal element is one selected from a group consisting of a straight element and a curved element, and wherein the circumferential elements are selected from a group consisting of straight elements and curved elements.

51. (Previously Presented) The endodontic instrument of claim 44, wherein the instrument is made from one selected from a group consisting of a

superelastic material, a material having shape memory properties, and a material treated to give the material shape memory properties.

52. (Previously Presented) The endodontic instrument of claim 44, wherein the instrument is made from a nickel titanium alloy.

53.-75. (Canceled)

76. (Currently Amended) The endodontic instrument of claim 40, wherein said open lattice structure ~~the flexible member~~ comprises a plurality of longitudinal elements extending generally parallel to the longitudinal axis, and a plurality of connecting elements interconnecting between said longitudinal elements.

77. (Previously Presented) The endodontic instrument of claim 76, wherein, in an uncompressed state of the flexible member, said longitudinal elements and said connecting elements lie substantially on a cylindrical profile.

78. (Canceled)

79. (Previously Presented) The endodontic instrument of claim 77, wherein said longitudinal elements and said connecting elements define an open structure such that a majority of an area of said cylindrical profile is open.

80. (Previously Presented) The endodontic instrument of claim 77, wherein at least part of each of said connecting elements extends in a direction having a longitudinal component.

81. (Previously Presented) The endodontic instrument of claim 40, wherein the flexible member is resiliently compressible such that, when the flexible member is rotated about said longitudinal axis, the flexible member remains pressed against an internal surface of a non-circular channel.

82. (Previously Presented) The endodontic instrument of claim 40, wherein the channel is non-circular in cross-sectional shape.

83. (New) An endodontic instrument for removing material from a wall of a channel, the instrument comprising a hollow flexible member having a longitudinal axis and an initial cross-sectional area in a plane perpendicular to the longitudinal axis at each point along the longitudinal axis, the member comprising an open structure comprising a plurality of longitudinal elements extending generally parallel to the longitudinal axis, and a plurality of connecting elements interconnecting between said longitudinal elements, said longitudinal elements and said connecting elements together defining an external profile of the member, a majority of an area of said external profile being open, the member being bendable along the axis and resiliently compressible in cross-sectional area such that, when inserted into a channel of cross-sectional area less than the initial cross-sectional area, the flexible member conforms to an internal shape of the channel.

84. (New) The endodontic instrument of claim 83, wherein the flexible member is a shape memory member.

85. (New) The endodontic instrument of claim 83, further comprising on at least a portion of an exterior surface of the member at least one selected from a group consisting of an abrasive surface, a roughened surface, small teeth, and a cutting edge.

86. (New) The endodontic instrument of claim 83, wherein said longitudinal elements and said connecting elements together form an open lattice structure.

87. (New) The endodontic instrument of claim 83, wherein the instrument is made from one selected from a group consisting of a superelastic material, a material having shape memory properties, and a material treated to give the material shape memory properties.

88. (New) The endodontic instrument of claim 83, wherein the instrument is made from a nickel titanium alloy.

89. (New) The endodontic instrument of claim 83, wherein, in an uncompressed state of the flexible member, said longitudinal elements and said connecting elements lie substantially on a cylindrical profile.

90. (New) The endodontic instrument of claim 83, wherein at least part of each of said connecting elements extends in a direction having a longitudinal component.

91. (New) The endodontic instrument of claim 83, wherein the flexible member is resiliently compressible such that, when the flexible member is rotated

about said longitudinal axis, the flexible member remains pressed against an internal surface of a non-circular channel.